



Early Childhood Development and Psychosocial Support in Migration Contexts: Programs, Policies and Possibilities for Sustainable Development

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December 10, 2019

Prepared on behalf of Amal Alliance in its partnership with the joint EC798 / IR798 “Capstone Course on Global Development,” Fall 2019, for the degrees of Masters of Development Economics and Masters of Global Policy, Department of Economics and Pardee School of Global Studies respectively, Boston University.



Abstract

It is well-established that early childhood development (ECD) programs contribute to more favorable human development trajectories. This research paper seeks to contribute to the existing literature by assessing how ECD interventions for refugee and migrant children can contribute to the United Nations 2030 Sustainable Development Agenda. The paper begins with a literature review of relevant publications, including articles, reports, and field studies. Based on the information ascertained from the literature review, researchers concluded that ECD interventions for migrant children can improve cognitive, physical, and social-emotional trajectories for children, which have strong implications for lifelong success. Effective ECD interventions are associated with higher academic achievements, higher rates of employment, and higher annual income. These outcomes contribute to achieving specific UN Sustainable Development Goals (SDGs) aimed at improving human health, providing better nutrition, increasing access to quality education, improving economic opportunities, reducing inequality, and strengthening institutional capacity through peace and justice. The paper concludes with a set of policy recommendations aimed at relevant international actors for implementing effective ECD programs for children in migration contexts.

Keywords: Child refugees, early childhood development, psychosocial, sustainable development

1. Introduction

This research paper seeks to assess how early childhood development (ECD) programs for migrant and refugee children can contribute to sustainable development. Evidence from numerous programs and studies have shown that ECD interventions, especially those with a focus on psychosocial support (PSS), can mitigate the effects of trauma in young children, including migrant children.¹ ECD programs can also improve long-term trajectories for physical, cognitive, and emotional growth. These factors can in turn contribute to academic achievements and employment opportunities later in life, which have significant implications for an individual's overall prosperity.² Migrant and refugee children are some of the most vulnerable individuals, and can only benefit from increased support for their overall development via targeted ECD and PSS interventions.

This paper will specifically review the existing literature on ECD programs in migration contexts and analyze its links to sustainable development using the United Nations' Sustainable Development Goals (UN SDGs, or SDGs). These seventeen goals constitute the UN's 2030 Agenda for Sustainable Development, which was adopted by all United Nations Member States in 2015. The Agenda is an action plan for sustainable human development by eradicating poverty while considering the economic, social, and environmental needs of all people.³ Each of the seventeen SDGs pertains to one aspect of sustainable development, such as eliminating hunger, ensuring good health and well-being, and guaranteeing education for all. ECD has potential to contribute to these goals by improving the physical, cognitive, and emotional development trajectories of migrant children and equipping them with the necessary foundational skills for lifelong success.

¹ Park, Maki, and Caitlin Katsiaficas. "Mitigating the Effects of Trauma among Young Children of Immigrants and Refugees: The Role of Early Childhood Programs." *Migration Policy Institute*, April 2019.

² Park, Maki, and Caitlin Katsiaficas, 2019.

³ "Transforming Our World: The 2030 Agenda for Sustainable Development." United Nations, September 2015.

ECD is an umbrella that encompasses a range of development milestones from birth until the age of eight, including physical, social-emotional, cognitive, and motor development.⁴ To achieve different mentioned milestones, different ECD interventions variedly focus on one or more of the components of ECD such as nutrition and weight gain,⁵ early stimulation,⁶ play,⁷ psychosocial health screening, and sensitizing and supporting caregivers in meeting their children's developmental needs.⁸ Mental health and PSS interventions are programs that aim to protect and promote psychosocial well-being and can be considered as a special branch of ECD interventions.⁹ Psychosocial well-being refers to biological, social, cultural, spiritual, emotional, mental and material aspects of one's experience.¹⁰ PSS programs that are specifically geared towards young children ideally aim to enhance children's coping capacity and build their resilience in a contextually appropriate way. For example, the International Rescue Committee (IRC) and Sesame Workshop have partnered to provide PSS through playful learning to refugee children from Syria, Jordan, Lebanon, and Iraq. To help equip children with language, math, reading, and social-emotional skills, the two organizations have partnered to create a new Sesame show in Arabic. Video clips and storybooks from the show featuring various Muppets with given Arabic names are used to help the refugee children develop social emotional skills and cope with tough emotions. Likewise, Amal Alliance is using a unique playful learning experience to help the refugee children deal with traumatic experiences. The organization uses various techniques including yoga, mindfulness education, and relaxation exercises to help

⁴ "WHO | Early Child Development," WHO, accessed November 26, 2019, http://www.who.int/maternal_child_adolescent/topics/child/development/en/.

⁵ Walker, Susan P, Susan M Chang, Christine A Powell, and Sally M Grantham-McGregor. "Effects of Early Childhood Psychosocial Stimulation and Nutritional Supplementation on Cognition and Education in Growth-Stunted Jamaican Children: Prospective Cohort Study." *The Lancet* 366, no. 9499 (November 19, 2005): 1804–7.

⁶ Nahar, B., M. I. Hossain, J. D. Hamadani, T. Ahmed, S. N. Huda, S. M. Grantham-McGregor, and L. A. Persson. "Effects of a Community-Based Approach of Food and Psychosocial Stimulation on Growth and Development of Severely Malnourished Children in Bangladesh: A Randomised Trial." *European Journal of Clinical Nutrition* 66, no. 6 (June 2012): 701–9.

⁷ BRAC Institute of Educational Development, "Humanitarian Play Labs," accessed October 8, 2019.

⁸ Moving Minds Alliance, 2019.

⁹ Soye, Emma, and Michaele Tauson. "Psychosocial Wellbeing and Socio-Emotional Learning in the Syrian Refugee Response: Challenges and Opportunities." Save the Children. Accessed September 30, 2019.

¹⁰ Soye, Emma, and Michaele Tauson, 2019.

children overcome traumatic experiences and build resilience. Social-emotional learning is a specific line of PSS programming for children. They basically aim to build social and emotional skills necessary for academic and life success such as self-awareness, self-management, and responsible decision making.¹¹

The intervention pyramid in Figure 1, given by the 2007 Inter-Agency Standing Committee (IASC) and referenced in a report by Save the Children, shows various tiers of these PSS programs.¹² Level 1 reflects protection of well-being of people through the provision of basic services and security, in socially appropriate, safe, and participatory ways. Level 2 is strengthening of community and family support, for example through providing child-friendly spaces (CFS) and activating social networks. Level 3 involves focused PSS programs and basic emotional and practical support to selected individuals or families. At level 4, specialized services are provided, including clinical mental health interventions.¹³

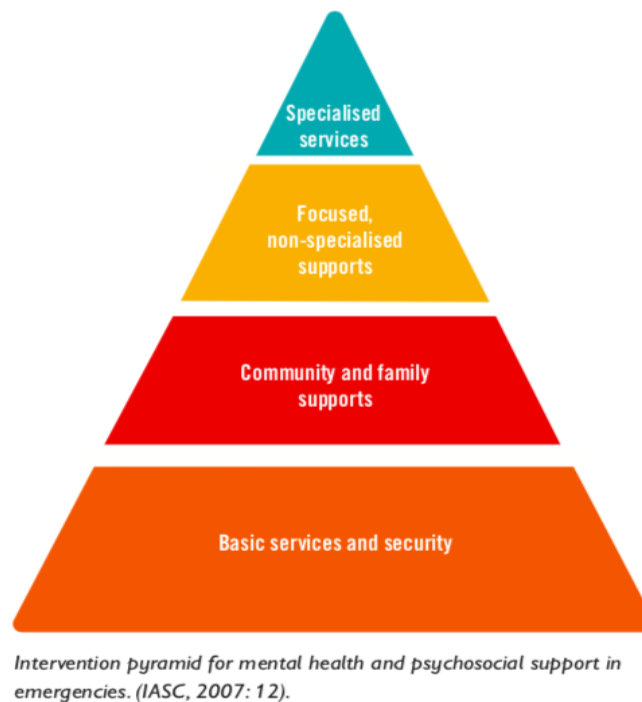


Figure 1

¹¹ Soye, Emma, and Michaëlle Tauson, 2019.

¹² Soye, Emma, and Michaëlle Tauson, 2019.

¹³ Soye, Emma, and Michaëlle Tauson, 2019.

Creating safe, child-friendly spaces is a core component of successful ECD programs.¹⁴ These spaces support learning through play and pro-social behavior between children. Child-friendly spaces also create a sense of safety and security in environments that are often unstable.¹⁵ This sense of security can reduce children’s stress levels, building a foundation for psycho-social well-being and reducing the effects of trauma.¹⁶ Play-based learning has been shown to boost literacy and numeracy in pre-primary education programs for migrant children.¹⁷ Learning through play also helps children transition to formal schools later in life.¹⁸

The need to support migrant and refugee children is more important than ever. Over the past twenty years, the number of forcibly displaced people has nearly doubled – from 33.9 million people in 1997, to 65.6 million people in 2016.¹⁹ Between 2011 and 2016 alone, the number of forcibly-displaced people increased by 65%.²⁰ This rapid escalation has been called a “crisis” as governments, non-governmental organizations (NGOs), inter-governmental organizations (IGOs), and other actors struggle to quickly and adequately respond to the needs of those displaced. Many of the forcibly displaced people are refugees and asylum seekers fleeing violent wars and conflicts.

Children are among the most vulnerable during migration crises and thus deserve special attention from humanitarian aid groups. Migrant children face threats of violence, sexual abuse, abduction, and recruitment into armed groups.²¹ Globally, children also make up more than half

¹⁴ Kamel, Hania. “Early Childhood Care and Education in Emergency Situations - UNESCO Digital Library.” *UNESCO*, 2006.

¹⁵ El-Kogali, Safaa El Tayeb, and Caroline Gould Krafft. “Expanding Opportunities for the next Generation: Early Childhood Development in the Middle East and North Africa.” The World Bank, January 7, 2015.

¹⁶ “Global Education Monitoring Report 2019: Migration, Displacement and Education: Building Bridges, Not Walls.”

¹⁷ Dallain, Sara-Christine, and Katie-Jay Scott. “Promising Practices in Refugee Education: Little Ripples.” iACT, March 2017.

¹⁸ El-Kogali, Safaa El Tayeb, and Caroline Gould Krafft, 2015.

¹⁹ Kolleen Bouchane, “Early Childhood Development and Early Learning for Children in Crisis and Conflict,” *UNESCO*, 2019.

²⁰ Kolleen Bouchane, 2019.

²¹ “UNICEF Humanitarian Action for Children 2019: Overview” (UNICEF, January 2019).

of the entire refugee population, and in 2015 more than 16 million babies were born in conflict zones.²² Young children are especially at risk. In crisis and conflict situations, children under the age of five have the highest rates of illness and death out of any age group – more than twenty times the global average.²³ Children that do survive forced migration must deal with the impacts of toxic stress from witnessing or experiencing traumatic events.²⁴ These “mental scars” can affect children’s learning, behavior, and emotional and physical development. Eighty-five percent of brain development occurs before the age of five, and 50% of a child’s cognitive capacity is influenced by his or her environment during this period.²⁵ This has significant implications for young migrant children; the effects of acute trauma and toxic stress have a disproportionate effect on their development compared to other age groups and can hinder societal sustainable development in the long-run.

Despite these staggering figures, most humanitarian and refugee response plans do not include specific programs aimed at encouraging healthy early childhood development for pre-primary age children.²⁶ ECD encompasses a range of development milestones from birth until the age of eight, including physical, social-emotional, cognitive, and motor development.²⁷ A small but growing body of research has found that access to quality ECD programs can help

²² Kolleen Bouchane, 2019.

²³ Kolleen Bouchane, 2019.

²⁴ “UNICEF Humanitarian Action for Children 2019: Overview.”

²⁵ Garcia, Marito, and Michelle Neuman. “FAQs: Early Childhood Development.” World Bank, July 2010.

²⁶ “Global Education Monitoring Report 2019: Migration, Displacement and Education: Building Bridges, Not Walls” (UNESCO, 2018).

²⁷ “WHO | Early Child Development,” WHO, accessed November 26, 2019,

ameliorate the effects of trauma and toxic stress.^{28 29 30} Trauma and toxic stress actively degrade healthy emotional responses in children, which – left unchecked – can have life-long impacts, including heightened PTSD symptoms, higher incidences of depression, and increased likelihood of experiencing unemployment or extreme poverty.³¹ ECD programs that include psycho-social support have been shown to be especially effective in reducing or reversing the effects of toxic stress.³² These findings have significant implications for migrant and refugee children who have been emotionally scarred by violence and upheaval. The work of numerous institutions, including the Amal Alliance and the Refugee Trauma Initiative, have already recognized these links and have designed programs to address the emotional needs of migrant children.^{33 34} This paper’s research will hone in on these findings, and will explicitly give attention to how ECD’s effects on human development can contribute to long-term sustainable development.

The enclosed report seeks to contribute to the growing body of research in this field by analyzing how ECD and PSS programs specifically designed for migrant children can help achieve the UN’s Sustainable Development Goals. The scholarly work in this area is relatively thin; to date, there have been no robust, long-term studies of ECD programs in migratory

²⁸ Bertram, Tony, and Chris Pascal. “Participation and Enrollment.” In *Early Childhood Policies and Systems in Eight Countries: Findings from IEA’s Early Childhood Education Study*, edited by Tony Bertram and Chris Pascal, 65–80. Cham: Springer International Publishing, 2016.

²⁹ Daelmans, Bernadette, et al., “Early Childhood Development: The Foundation of Sustainable Development.” *The Lancet* 389, no. 10064 (January 7, 2017): 9–11.

³⁰ Ponguta, Liliana et al., “Early Childhood Development Programs, Peacebuilding, and the Sustainable Development Goals: Opportunities for Interdisciplinary Research and Multisectoral Partnerships.” In *Developmental Science and Sustainable Development Goals for Children and Youth*, edited by Suman Verma and Anne C. Petersen, 77–95. Social Indicators Research Series. Cham: Springer International Publishing, 2018.

³¹ Park, Maki, and Caitlin Katsiaficas, 2019.

³² Panter-Brick, Catherine, Rana Dajani, Mark Eggerman, Sabrina Herмосilla, Amelia Sancilio, and Alastair Ager. “Insecurity, Distress and Mental Health: Experimental and Randomized Controlled Trials of a Psychosocial Intervention for Youth Affected by the Syrian Crisis.” *Journal of Child Psychology and Psychiatry* 59, no. 5 (May 2018): 523–41.

³³ Moving Minds Alliance. “Baytna: Early Childhood Development for Refugees in Greece.” Refugee Trauma Initiative, May 2019.

³⁴ “Psychosocial Support and Social-Emotional Learning.” The Amal Alliance, n.d.

contexts. Recent research has only begun to link ECD with sustainable development.^{35 36} This paper will draw on the work of NGOs, IGOs, and non-profit institutions to map out the existing field of work. When appropriate, the paper will also rely on proxy studies to examine the effects of ECD programs on other underserved or vulnerable populations.

This paper will begin by providing a brief overview of the researchers' methodology to provide basic context. Next, a significant portion will be dedicated to a literature review of relevant material. After establishing a basic scope of existing research and evidence on ECD in migrant contexts, the next section will attempt to provide concrete links between this subject and the UN's Sustainable Development Goals. The paper will conclude by outlining policy implications and recommendations for a variety of actors and institutions. By analyzing the existing literature using the UN Sustainable Development Goals as a basic framework, this paper seeks to illuminate the potential for ECD programs in migrant contexts as a tool to encourage sustainable, equitable human development.

2. Methodology

Initial research focused specifically on examining the existing literature on ECD and PSS for refugee and migrant children. When appropriate, proxy studies on other underserved or vulnerable children were used. Articles, reports, and field studies were identified in various online databases such as Pubmed, BU libraries databases, UNESDOC digital library, Google Scholar, and relevant NGOs and IGOs. This established a basic understanding for short- and long-term impacts of ECD programming on human development trajectories.

The second phase of research honed in on sustainable development. Literature on the UN's 2030 Sustainable Development Agenda was thoroughly reviewed. Studies and reports linking ECD and sustainable development were given specific attention. Researchers analyzed and synthesized this information into a framework to assess our review of ECD outcomes for

³⁵ Daelmans, Bernadette et al., 2017.

³⁶ Ponguta, Liliana et al., 2018.

migrant children. This framework was then used to determine the degree of relevance for specific ECD outcomes for migrant children and SDG targets.

The final portion of research was aimed at developing policy recommendations targeted at relevant institutional sectors. These recommendations were formulated based on analysis of how ECD can contribute to UN Sustainable Development Goals.

3. Literature Review

The number and current state of globally displaced children, including refugee children, is of extreme concern. According to UNHCR estimates, there were 138,600 unaccompanied or separated child refugees by the end of 2018.³⁷ Half of all the global refugees are children and most of them (about 4 million) do not have access to education.³⁸ Only 61% of refugee children attend primary school, 23% of refugee adolescents attend secondary school, and only 1% attend university. This is not surprising considering less than 2% of all humanitarian aid funding goes toward education, and only a small portion of this funding goes to educating young children.³⁹ Furthermore, displaced persons now spend an average of 17-20 years in protracted refugee situations, meaning that education programs must be available for refugees in host countries.⁴⁰ The UN recognizes that children have a right to education from birth.⁴¹ Failure to provide this basic right to 4 million children means a spectrum of lost opportunities for them, their families and the society.

³⁷ UNHCR, “Global Trends - Forced Displacement in 2018,” UNHCR Global Trends 2018, accessed October 27, 2019.

³⁸ Mason, Claire, and Shannon Orcutt. “Hear It From the Teachers: Getting Refugee Children Back to Learning.” Save the Children, October 5, 2018.

³⁹ “Education Cannot Wait: Financing Education in Emergencies Challenges and Opportunities.” Carfax Education, June 6, 2013.

⁴⁰ United Nations High Commissioner for Refugees, “Missing Out: Refugee Education in Crisis,” UNHCR, accessed November 26, 2019.

⁴¹ “International Instruments: Right to Education.” Right to Education Project, January 2014.

Lack of proper learning facilities and care, especially for unaccompanied children, can hinder their mental and physical development. Sikic et al. found that the incidence of depression, violence and antisocial behavior in refugee children was the highest when compared to non-displaced and internally displaced children groups.⁴² A report by Early Childhood Peace Consortium pointed out that toxic stressors and malnutrition in the early years could lead to individual, interpersonal, and societal risks. Individual and interpersonal risks include the development of detrimental psychological processes that could lead to violent behavior, harmful relationships, aggression, substance abuse, and depression. Societal risks include increased inequalities, crime rate, intergenerational cycles of violence and poverty, reduced gross national income, higher unemployment rates, and decreased trust.⁴³

To protect young refugees from such consequences, the evidence suggests that it is most effective to intervene in the earliest years since early childhood is a time of remarkable growth with brain development at its peak. Importance of proper early-age care and education can be substantially attributed to the crucial window of the most active period for the brain's neural connection formation.⁴⁴ Behavioral neuroscience has demonstrated that exposure to distress and chronic anxiety in the early years affects children's ability to learn and socialize since such experiences disrupt the developing 'architecture of the brain'.⁴⁵ Particularly, two neuropeptides (signaling molecules in the brain engaged in many physiological functions), oxytocin and vasopressin, appear to play a key role in the development of intricate dynamic relationships and social bonding.⁴⁶ For example, Van IJzendoorn and Bakermans-Kranenburg have demonstrated

⁴² Sikić, N., N. Javornik, M. Stracenski, T. Bunjevac, and G. Buljan-Flander. "Psychopathological Differences among Three Groups of School Children Affected by the War in Croatia." *Acta Medica Croatica: Casopis Hrvatske Akademije Medicinskih Znanosti* 51, no. 3 (1997): 143–49.

⁴³ Donaldson, Chelsea. "Contributions of Early Childhood Development Services to Preventing Violent Conflict and Sustaining Peace." Early Childhood Peace Consortium, 2017.

⁴⁴ "Brain Architecture," Center on the Developing Child at Harvard University, accessed November 25, 2019.

⁴⁵ Hoffman, Martin T. "The Science of Early Childhood Development." National Scientific Council on the Developing Child, August 2008.

⁴⁶ ACED - Yale, "Formative Childhoods and Peace Building" (Mother Child Education Foundation, May 27, 2015).

that sniffing oxytocin elevates the in-group trust levels.⁴⁷ Likewise, in their study, Dreu et al. found that oxytocin stimulates in-group favoritism and cooperation.⁴⁸ These studies suggest that the neurobiology of early life bonds can influence human physiology which in turn has an impact on peace-building. Furthermore, evidence from environmental and bio-behavioral sciences have shown that environmental stressors play a key role in the development of behavioral mechanisms.⁴⁹ While there has been a lot of emphasis on the genetic endowment, there is compelling evidence that shows that a child's environment also plays an essential role in the development of behavior patterns because 'gene function can be regulated and is responsive to time-sensitive environmental cues'.⁵⁰

Yet, fifty percent of all active refugee and humanitarian response plans make no mention of ECD programs.⁵¹ Moreover, despite the importance of providing educational, social-emotional support, and/or psychosocial programming for young children (aged 0-6), ECD in humanitarian contexts lacks thorough data collection of, for example, cost-benefit analyses of programs, physical and mental health outcomes of participants, and data regarding program quality assessment. Limited amount of research directed at effectiveness of ECD programs on children in the migration contexts follows as a result.

ECD programs targeted at other populations of vulnerable children (e.g. children from low-income and disadvantaged backgrounds, and those residing in low- and middle-income countries (LMICs)) have a more robust body of literature. The literature reviewed here will use examples of ECD and psychosocial interventions for these children as their development

⁴⁷ Van IJzendoorn, Marinus H., and Marian J. Bakermans-Kranenburg. "A Sniff of Trust: Meta-Analysis of the Effects of Intranasal Oxytocin Administration on Face Recognition, Trust to in-Group, and Trust to out-Group." *Psychoneuroendocrinology* 37, no. 3 (March 2012): 438–43.

⁴⁸ De Dreu, Carsten K. W., Lindred L. Greer, Gerben A. Van Kleef, Shaul Shalvi, and Michel J. J. Handgraaf. "Oxytocin Promotes Human Ethnocentrism." *Proceedings of the National Academy of Sciences of the United States of America* 108, no. 4 (January 25, 2011): 1262–66.

⁴⁹ Hall, Labouisse. "Early Childhood Peace Consortium - Content, Key Outcomes and Next Steps." New York, NY: UNICEF, December 20, 2013.

⁵⁰ Hall, Labouisse, 2013.

⁵¹ Bouchane, Kolleen, 2019.

outcomes often face similar threats of violence, trauma, and other stressors, and thus the research findings could predict similar outcomes when applied to the migration context.

Certain components of ECD programs yield more long-lasting effects than other components. A landmark study in Jamaica showed that, regardless of whether the intervention included a nutritional component, PSS and early stimulation interventions yielded positive physical health benefits for stunted infants and children.⁵² This is especially important considering that studies have shown growth-stunted children are at a higher risk for non-communicable diseases, such as diabetes and cardiovascular disease, later in life.⁵³ However, in many cases, stimulation of one ECD component naturally leads to improvement of other components. Encouraging prosocial behavior boosts social-emotional and cognitive development, which provide a foundation for productive and satisfactory life-outcomes.⁵⁴ One study found that curricula specifically aimed at encouraging empathy through socialization can reduce discriminatory behavior in children as young as 4 and 5 years old.⁵⁵ Similarly, an initiative was developed in Northern Ireland to encourage young children to “value cultural diversity and respect differences within a deeply divided society that is emerging out of a prolonged period of violent conflict.”⁵⁶ The initiative, called the Media Initiative for Children—Northern Ireland, used short cartoons designed for broadcasting on TV and pre-school curricula to teach children about building a more inclusive society. The program had a positive impact on children’s ability to recognize instances of exclusion, to understand how being excluded feels, and to willingly play with others.

⁵² Walker et al., “Effects of Early Childhood Psychosocial Stimulation and Nutritional Supplementation on Cognition and Education in Growth-Stunted Jamaican Children.”

⁵³ Duncan, Greg J et al. “National Forum on Early Childhood Program Evaluation.” Center on the Developing Child, Harvard University, 2007.

⁵⁴ Shonkoff, Jack P et al. “Persistent Fear and Anxiety Can Affect Young Children’s Learning and Development: Working Paper No. 9.” Center on the Developing Child, Harvard University, February 2010.

⁵⁵ Kamel, Hania, 2006.

⁵⁶ Connolly, Paul, Siobhan Fitzpatrickb, Tony Gallagher, and Paul Harris. “Addressing Diversity and Inclusion in the Early Years in Conflict-Affected Societies: A Case Study of the Media Initiative for Children—Northern Ireland.” *International Journal of Early Years Education* 14, no. 3 (October 2006): 263–78.

Parenting and at-home interactions also play an influential role in ECD. The quality of adult-child interactions has a significant impact on a child's development – specifically the child's social-emotional and cognitive development.⁵⁷ In migrant contexts, parents may be just as traumatized as children are. ECD programs can address this by providing counseling or psychosocial support for parents.⁵⁸ In situations where formal pre-primary education is not possible, educating parents about ECD can serve as an alternative to formal schooling.⁵⁹ An ECD pilot program in a Palestinian refugee camp found that training sessions for mothers improved children's cognitive skills.⁶⁰ Mothers also became more aware of their child's development needs. In another relevant program implemented in war-torn Bosnia and Herzegovina, weekly group meetings with mothers for 5 months saw, post-intervention, child weight gain, improved measures of psychosocial functioning for children and mental health benefits for both children and their mothers.⁶¹ Similarly, an ECD program for refugees in Lebanon educated both fathers and mothers about children's physical, cognitive, and social-emotional development.⁶² An impact assessment found that the program had overall positive impacts on families' understanding of their children's development needs. In war-torn Sri Lanka, an ECD program involving caregivers showed that parental care was associated with moderating the relationship between trauma and behavior problems amongst children.⁶³

An assessment of the long-term study called the Turkish Early Enrichment Project (TEEP) revealed that early interventions designed for children in deprived environments have

⁵⁷ “Global Education Monitoring Report 2019: Migration, Displacement and Education: Building Bridges, Not Walls.”

⁵⁸ Bouchane, Kolleen, 2019.

⁵⁹ “Refugee Trauma Initiative: Impact Report 2018” (Refugee Trauma Initiative, 2018).

⁶⁰ “Global Report on Equity and Early Childhood.” Consultative Group on Early Childhood Care and Development, 2016.

⁶¹ Dybdahl, Ragnhild. “Children and Mothers in War: An Outcome Study of a Psychosocial Intervention Program.” *Child Development* 72, no. 4 (2001): 1214–1230.

⁶² “Global Report on Equity and Early Childhood,” 2016.

⁶³ Sriskandarajah, Vathsalan, Frank Neuner, and Claudia Catani. “Parental Care Protects Traumatized Sri Lankan Children from Internalizing Behavior Problems.” *BMC Psychiatry* 15 (August 25, 2015): 203.

positive effects on the overall development of the children well into adulthood.⁶⁴ The study found that, 22 years later, children who either experienced educational preschool (between the ages of 4 and 6) or whose mothers received training in conducting cognitively stimulating activities, had more favorable ‘trajectories of development into young adulthood in the cognitive achievement and social developmental domains’ than comparable children who did not receive the enrichment training. Family members, especially mothers and fathers, and other caregivers are, therefore, essential in achieving a wide range of positive outcomes related to health, academic success, economic achievement, and social adjustment in the adult years.⁶⁵

Effective ECD interventions also generate positive ripples for later stages of a child’s educational attainment. Post-situational studies have found that pre-primary education attendance significantly impacted educational achievement later in life. One study of resettled 15-year old immigrants found that students who attended pre-primary education for at least one year scored significantly higher on standardized tests than those who had not. The same study then examined immigrant student’s scores based on socio-economic backgrounds. Researchers found that access to pre-primary education was a better predictor of educational achievement than their family’s socio-economic standing.⁶⁶ Another study conducted in Germany and Austria found that immigrants’ pre-primary school attendance significantly increased the likelihood of continuing education through secondary and tertiary school.⁶⁷

However, an overarching problem of literature on ECD programs in migratory contexts is the lack of long-term follow-up studies to measure the outcomes. In looking at the pool of studies on ECD programming in migration or similar contexts, both the duration of interventions and their follow-ups are mostly in the short-term. One meta-study of eleven ECD interventions

⁶⁴ Cigdem, Kagitecibasi et al., “Continuing Effects of Early Enrichment in Adult Life: The Turkish Early Enrichment Project 22 Years Later,” *Journal of Applied Developmental Psychology* 30, no. 6 (2009): 764–79,

⁶⁵ Sunar, Diane, Cigdem Kagitecibasi, James Leckman, Pia Britto, Catherine Panter-Brick, Kyle Pruett, Maria Reyes, et al. “Is Early Childhood Relevant to Peacebuilding?” *Journal of Peacebuilding and Development* 8, no. 3 (December 1, 2013): 81–85.

⁶⁶ “Starting Strong 2017 | READ Online,” OECD iLibrary, accessed September 16, 2019,

⁶⁷ “Global Education Monitoring Report 2019: Migration, Displacement and Education: Building Bridges, Not Walls” (UNESCO, 2018).

specifically for refugee children noted that the longest program spanned only three months⁶⁸ with follow-up conducted within the following month in all eleven studies. Amongst ECD interventions for refugee children, the longest follow-up period measuring program impact was 18 months.⁶⁹ In the related literature on children in other vulnerable circumstances, follow-ups spanned up to 40 years after ECD and psychosocial program participation.⁷⁰ Some attribute this disparity in follow-up to refugees' mobile status, which makes it difficult to track participants over the years, and the cost of such long-term program evaluations.

The aforementioned meta-study of eleven psychosocial interventions for children in refugee settings found that after the program such participants showed mental health and psychosocial benefits, including lower stress levels, improved post-traumatic stress disorder (PTSD) symptoms, and less functional impairment. An evaluation of an ECD and psychosocial program for refugee children in Uganda found that program exposure brought similar benefits: lower stress, better psychosocial well-being, and increased developmental assets immediately after the 3-6 month program.⁷¹

Amongst refugee children in Rwanda who received PSS interventions, all short-term improvements related to stress, psychosocial well-being and developmental assets went back to baseline just 18 months post-intervention.⁷² On the other hand, in a 30-year follow-up to ECD exposure for disadvantaged children, program enrollment was associated with longer-term impacts on socio-adjustment outcomes.⁷³ The program saw a reduction in self-reported

⁶⁸ Purgato, Marianna, Alden L. Gross, Theresa Betancourt, Paul Bolton, Chiara Bonetto, Chiara Gastaldon, James Gordon, et al. "Focused Psychosocial Interventions for Children in Low-Resource Humanitarian Settings: A Systematic Review and Individual Participant Data Meta-Analysis." *The Lancet. Global Health* 6, no. 4 (2018): e390–400.

⁶⁹ Metzler, Janna et al. "Short- and Longer-Term Impacts of Child Friendly Space Interventions in Rwamwanja Refugee Settlement, Uganda." *Journal of Child Psychology and Psychiatry*, May 2019.

⁷⁰ Campbell, Frances A. et al. "Adult Outcomes as a Function of an Early Childhood Educational Program: An Abecedarian Project Follow-Up." *Developmental Psychology* 48, no. 4 (July 2012): 1033–43.

⁷¹ Metzler, Janna et al., 2019.

⁷² Metzler, Janna et al., 2019.

⁷³ Campbell, Frances A. et al, 2012.

depressive symptoms at the age of 21 but not in the 30-year follow-up.⁷⁴ This reversal of positive outcomes (in 18 months for refugee children but much later for other children) may be an overall indication that interventions must encompass a continuum of care for refugee children and their caregivers, including the prenatal period.⁷⁵ ⁷⁶ Mixed results for long-term impacts also indicate a need for more long-term assessments of programs.

Proper ECD interventions are not only acutely beneficial health-wise, both mentally and physically, but also economically. Benefits of ECD programs encompass both monetary benefits to the participants and to the society at large.⁷⁷ Individual-level benefits include higher employability and higher per capita income. A seminal longitudinal study on growth-stunted children in Jamaica found that early childhood social-emotional stimulation translated into long-term economic success. Specifically, the researchers found that 20 years after the intervention, annual earnings of treated participants caught up with earnings of their non-stunted peers. Non-treated stunted peers were found to earn 25% less on average than the non-stunted group.⁷⁸

For society, benefits of ECD interventions are largely social savings from the otherwise needed expenditures such as unemployment subsidies, welfare assistance, costs of police deployment, and imprisonment. Taxes from higher earnings of treated children may also be included as societal benefits.⁷⁹ A program for early childhood behavioral development in Ireland trained parents of 3 to 8-year-olds in communication, rule-setting, anger management, and problem-solving. Families that participated in the program exhibited a sharper decline in public

⁷⁴ Campbell, Frances A. et al, 2012.

⁷⁵ R. Srinivasa Murthy and Rashmi Lakshminarayana, “Mental Health Consequences of War: A Brief Review of Research Findings,” *World Psychiatry* 5, no. 1 (February 2006): 25–30.

⁷⁶ Campbell, Frances A. et al, 2012.

⁷⁷ Duncan, Greg J. et al. “National Forum on Early Childhood Program Evaluation.” Center on the Developing Child, Harvard University, 2007.

⁷⁸ Gertler, Paul et al. “Labor Market Returns to an Early Childhood Stimulation Intervention in Jamaica.” *Science* 344, no. 6187 (May 30, 2014): 998–1001.

⁷⁹ Bouchane, Kolleen, 2019.

services utilization 6 months after the intervention compared to the control group.⁸⁰ Evidence from the U.S. also suggests that early childhood intervention programs for vulnerable children can reduce later incidents of crime, promote high school graduation and college attendance, reduce grade repetition and special education costs, and help prevent teenage and out-of-wedlock births.⁸¹

Though ECD programs have proven to yield significant economic benefits, it is equally important to consider program costs. The sum required for teacher salaries, constructing and maintaining facilities, providing educational materials, and other program components can be cost-prohibitive in certain contexts.⁸² The more intensive the program, the higher the cost. Studies find mixed results as to whether or not expensive programs yield more favorable results.⁸³

However, early childhood is the most cost-effective period in a person's life in which to invest; studies have shown that early intervention programs geared towards vulnerable children have much higher returns than later interventions.⁸⁴ Figure 2 displays the rates of return to human capital investment in disadvantaged children. The downward curving slope plots the payout per year per dollar invested in human capital programs at different stages of development. The figure shows that investing in preschool programs yields the highest rate of return. This can be partially attributed to biological development.

⁸⁰ O'Neill, Donal. "A Cost-Benefit Analysis of Early Childhood Intervention: Evidence from a Randomised Evaluation of a Parenting Programme." IZA, October 2009.

⁸¹ Grunewald, Rob, and Arthur J Rolnick. "An Early Childhood Investment with a High Public Return." *The Regional Economist*, July 2010.

⁸² Dalziel, Kim M., Dale Halliday, and Leonie Segal. "Assessment of the Cost-Benefit Literature on Early Childhood Education for Vulnerable Children: What the Findings Mean for Policy." *SAGE Open* 5, no. 1 (March 20, 2015).

⁸³ Dalziel, Kim M., Dale Halliday, and Leonie Segal, 2015.

⁸⁴ Heckman, James J. "Skill Formation and the Economics of Investing in Disadvantaged Children." *LIFE CYCLES* 312 (June 2006): 1900-1902; Sayre, Rebecca K, Amanda E Devercelli, Michelle J Neuman, and Quentin Wodon. "Investing in Early Childhood Development." World Bank Group, 2015.

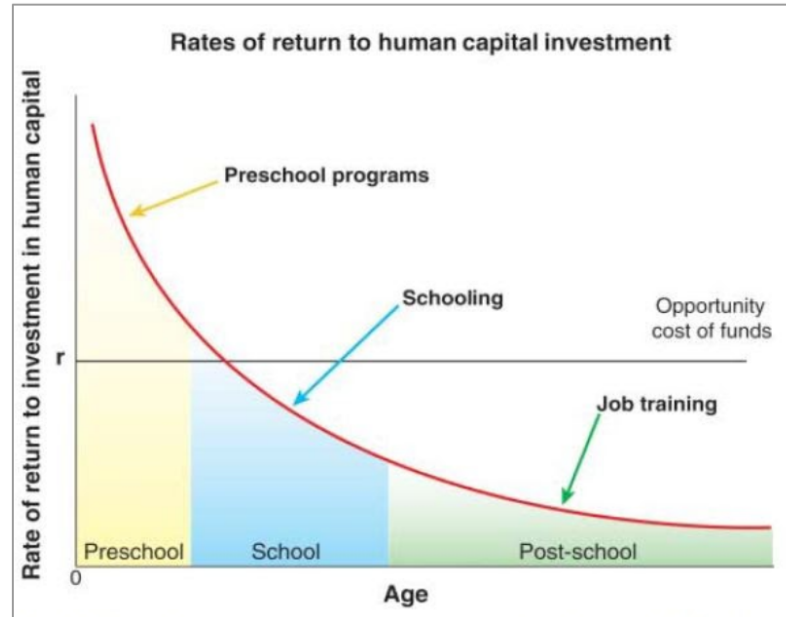


Figure 2
Source: Heckman (2006)

It is well-established that the brain is most receptive to environment and learning in a child's early years.⁸⁵ Effective early childhood interventions provide a solid foundation for a future cognitive, physical, mental, and socio-emotional development. With this foundation, children are more receptive to new information, are open to learning, and perform better in school.⁸⁶ Children build upon these foundational skills as they transition into adulthood. Without external interventions, vulnerable children are less likely to reach potential economic contributions, and are more likely to impose financial costs on society later in life (e.g. dependency on welfare, education remediation, engagement in criminal activities).⁸⁷ Engle et al. (2011) used a simulation model and a cost-benefit framework to analyze the potential long-term effects of increasing preschool enrollment to 25-50% in low-income and middle-income countries.⁸⁸ The researchers found that a 50% increase in children's pre-school enrollment could

⁸⁵ Duncan, Greg J. et al, 2007.

⁸⁶ Duncan, Greg J. et al, 2007.

⁸⁷ Heckman, James J, and Dimitriy V Masterov. "The Productivity Argument for Investing in Young Children." *Review of Agricultural Economics* 29, no. 3 (2007): 446–93.

⁸⁸ Engle, Patrice L. et al. "Strategies for Reducing Inequalities and Improving Developmental Outcomes for Young Children in Low-Income and Middle-Income Countries." *The Lancet* 378, no. 9799 (October 2011): 1339–53. [1](#).

produce a US \$15–\$34 billion increase in GDP. They also found a benefit-to-cost ratio ranging from 6:4 to 17:6, depending on factors like preschool enrollment rates and discount rates.⁸⁹

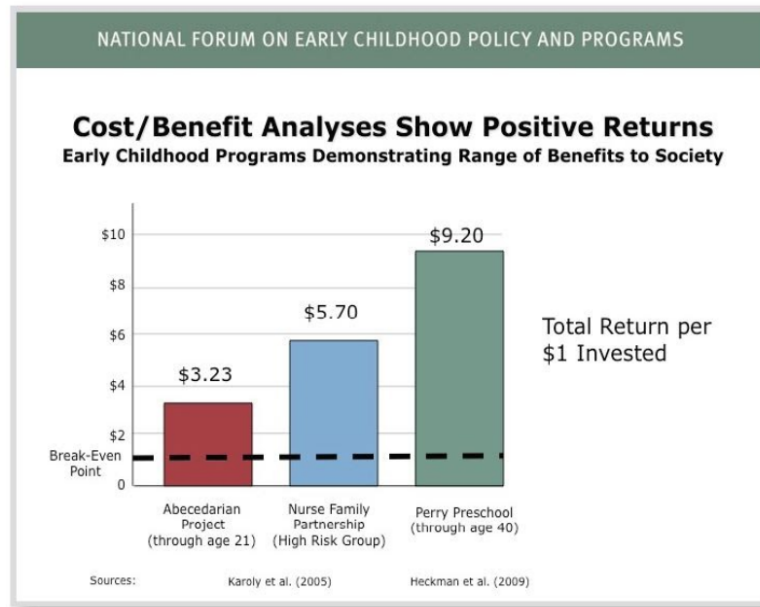


Figure 3
Source: In Brief: Early Childhood Program Effectiveness (2007).

Figure 3 displays long-term cost-benefit ratios from three rigorously studied ECD programs in the United States. Though there is a significant range in dollar returns per dollar invested, the returns are always positive. Financial returns of other successful ECD programs range from \$3.80 to \$17 per dollar invested.⁹⁰ A systematic review of ECD programs from Dalziel et al (2015) finds that the Abecedarian project (North Carolina) gives returns of \$3.80 per \$1 invested, and that the Chicago Parent Child Center Program returns up to \$10.80 per \$1.⁹¹ One of the highest yielding ECD programs whose intervention data and follow-up data were recorded vigorously is the Perry Preschool Project. This project realized an internal rate of return of \$16 per \$1 invested (with a lower bound of \$5.80:\$1 when sensitivity analysis is

⁸⁹ Engle, Patrice L. et al., 2011

⁹⁰ Dalziel, Kim M., Dale Halliday, and Leonie Segal, 2015; Duncan, Greg J. et al, 2007; Engle, Patrice L. et al., 2011.

⁹¹ Dalziel, Kim M., Dale Halliday, and Leonie Segal, 2015.

considered), \$4:\$1 return towards the participants themselves and \$12:\$1 of benefits realized by the society at large.⁹² Figure 4 shows how long-term net benefits of the Perry Preschool Project (measured in lowered crimes rates, per-capita earnings, and savings on social program participation) far outweigh initial program costs. These benefits begin to accrue as participating children reach their late twenties, and reach their peak by participants' late thirties. Benefits continue to be positive even after age fifty. There are, however, a few ECD programs that yield benefits of less than \$1 per dollar invested. Analyses of Even Start, Early Head Start, and Sure Start programs estimate benefit-cost ratios of lower than one.⁹³ The literature revealed an opportunity to renew the importance of process evaluations when conducting ECD and psychosocial interventions, as high-quality programming yields the highest health and monetary returns.⁹⁴

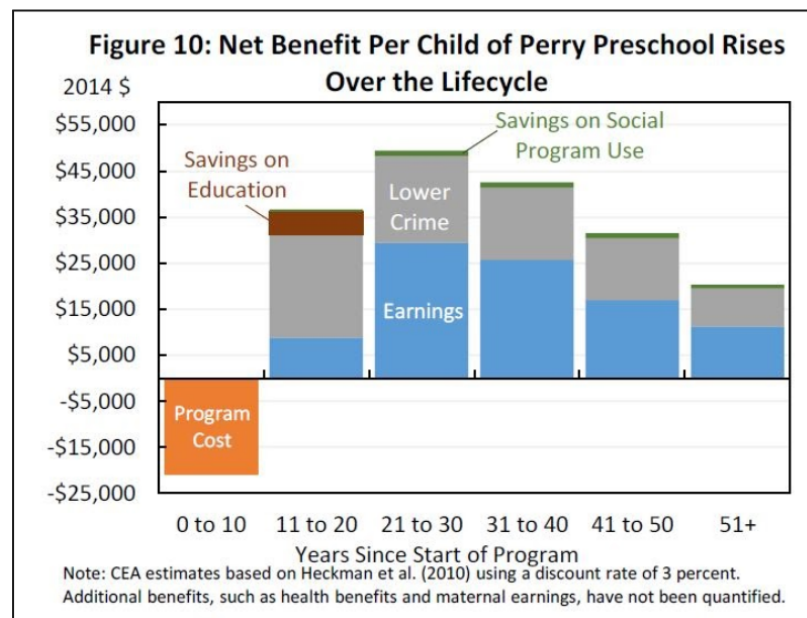


Figure 4
Source: The Economics of Early Childhood Investments (2015)

⁹² Duncan, Greg J. et al, 2007; Heckman, James J., Seong Hyeok Moon, Rodrigo Pinto, Peter A. Savelyev, and Adam Yavitz. “The Rate of Return to the HighScope Perry Preschool Program.” *Journal of Public Economics* 94, no. 1–2 (February 2010): 114–28; Manning, Maryann, and Janice Patterson. “Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40.” *Childhood Education* 3, no. 2 (Winter /2007 2006): 121.

⁹³ Dalziel, Kim M., Dale Halliday, and Leonie Segal, 2015.

⁹⁴ Dalziel, Kim M., Dale Halliday, and Leonie Segal, 2015.

Funding is an especially significant barrier for these programs; between construction of classrooms, teacher salaries, and distribution of basic school materials to children, education is a long-term systematic investment.⁹⁵ Many NGOs, IGOs, and local governments do not have the resources to incentivize teachers to work with young refugee children. Teachers often play a critical role in the early childhood education; they cultivate safe learning and play spaces and are tasked with managing the overall well-being of their students. However, teachers in emergency contexts often lack proper training and resources to provide quality education.⁹⁶ Limited or inconsistent salaries, low social status and unsafe living environment are strong barriers to long-term program success.⁹⁷

A study in Ghana found that an in-service training and coaching program for kindergarten teachers improved their use of the play-based kindergarten-specific pedagogy specified in Ghana's national curriculum and these positive effects persisted one year later.⁹⁸ In addition, the program improved children's school readiness, including their early literacy, early numeracy, and social-emotional skills in the first year, while impacts on social-emotional development persisted even after children had moved to their next year of schooling.

Several references implore the use of contextual analyses and needs assessments before planning an ECD intervention in order to better understand local understandings of child health and well-being.⁹⁹ One such analysis amongst mothers with small children (ages 0-2) in rural Malawi found that caregivers' perceptions of child health and well-being did not exactly align with researchers' notions of those things.¹⁰⁰ Identifying and addressing such assumptions about program beneficiaries and their beliefs helps refine measurement instruments and evaluation

⁹⁵ Mason, Claire, and Shannon Orcutt, 2018.

⁹⁶ Mason, Claire, and Shannon Orcutt, 2018

⁹⁷ Mason, Claire, and Shannon Orcutt, 2018.

⁹⁸ Dowd, Amy Jo, Nikhit D'Sa, Frannie Noble, Marianne O'Grady, Lauren Pisani, and Jonathan Seiden. "Beyond Access: Exploring Equity in Early Childhood Learning and Development." Save the Children, June 5, 2018.

⁹⁹ "Implementing a Safe Healing and Learning Space - Manager's Guide." International Rescue Committee, 2016.

¹⁰⁰ Gladstone, Melissa, John Phuka, Shirin Mirdamadi, Kate Chidzalo, Fatima Chitimbe, Marianne Koenraads, and Kenneth Maleta. "The Care, Stimulation and Nutrition of Children from 0-2 in Malawi—Perspectives from Caregivers; 'Who's Holding the Baby?'" *PLOS ONE* 13, no. 6 (June 27, 2018): e0199757.

indicators. Language can also be a significant barrier for migrant children in both refugee camps and in resettled situations.¹⁰¹ ECE programs primarily conducted in a foreign language can potentially have negative effects on migrant children by making them feel excluded.¹⁰² When left unaddressed, language barriers between children can also lead to discrimination and bullying. The most effective ECE programs are context-specific, considering not only language, but also cultural expectations about gender and disabilities.¹⁰³ Despite their usefulness, contextual analyses were not conducted by most ECD interventions that we reviewed.

Contextual analyses are also important while considering the two primary modes of ECD and psychosocial program delivery: center-based¹⁰⁴ and home-based care.¹⁰⁵ Home-based programs equip primary caregivers with essential skills to support their children's early development.¹⁰⁶ This way, early childhood programs also benefit primary caregivers. Home-based programs have specifically proven to reduce growth-stunting and improve children's language development. Center-based programs can be equally effective, and enable low-income and vulnerable primary caregivers to spend more time at work and earn more in the labor market.¹⁰⁷ This is especially important in resettled refugee communities, where families often do not have immediate financial stability. Not only does increased work force participation benefit individual families, it also benefits the economy as a whole.¹⁰⁸ Overall, there is scarce evidence

¹⁰¹ Bennett, John, Bridget Egan, Tina Hyder, Linda Pound, Norma Raynes, Naomi Richman, Judy Stephenson, Mike Wessels, Sheila Wolfendale, and Jeremy Woodcock. "How Effective Are Measures Taken to Mitigate the Impact of Direct Experience of Armed Conflict on the Psychosocial and Cognitive Development of Children Aged 0-8?" *Centre for Poverty and Social Justice at the School for Policy Studies, University of Bristol*, June 2005, 79.

¹⁰² "Global Education Monitoring Report 2019: Migration, Displacement and Education: Building Bridges, Not Walls."

¹⁰³ Kamel, Hania, 2006.

¹⁰⁴ Purgato, Marianna et al., 2018.

¹⁰⁵ Walker, Susan P. et al., 2005.

¹⁰⁶ Rockers, Peter C., Arianna Zanolini, Bowen Banda, Mwaba Moono Chipili, Robert C. Hughes, Davidson H. Hamer, and Günther Fink. "Two-Year Impact of Community-Based Health Screening and Parenting Groups on Child Development in Zambia: Follow-up to a Cluster-Randomized Controlled Trial." Edited by James K. Tumwine. *PLOS Medicine* 15, no. 4 (April 24, 2018): e1002555.

¹⁰⁷ Dalziel, Kim M., Dale Halliday, and Leonie Segal, 2015.

¹⁰⁸ Rockers, Peter C. et al., 2018.

that suggests that one mode is associated with better outcomes; rather, the choice of implementing a center- or home-based program delivery model appears to depend more on available resources and start-up costs of building centers, though center-based ECD interventions are nonetheless shown to be cost-effective.

Pre-primary education programs do not have to take place only in classrooms. Many of the most effective programs encourage parent and community participation. One program operating in several refugee camps in Chad aims to build the community's capacity to manage in-home preschools.¹⁰⁹ Program operators identify a program host family in the refugee camp. The family receives special training, a salary, and a daily meal in exchange for using their home as a community preschool. A review of the program found that in-home preschools were more accessible and efficient compared to classroom-based early childhood education (ECE) programs. It also led to more community engagement and long-term participation from both students and teachers.¹¹⁰

Migrant communities that actively participate in or benefit from ECD programs are more likely to engage meaningfully in activities that support child development.¹¹¹ Community-led childcare, sports, and homework groups strengthen the quality of adult-child interactions, creating a strong foundation for socio-emotional and cognitive development. Programs that train migrant families and other community members are more resilient and self-sufficient in the long-run, often requiring less long-term funding.¹¹² Leveraging existing regional education systems, including traditional systems of community care, can benefit all learners and promote long-term community development.¹¹³

¹⁰⁹ Dallain, Sara-Christine, and Katie-Jay Scott, 2017.

¹¹⁰ Dallain, Sara-Christine, and Katie-Jay Scott, 2017.

¹¹¹ "Global Education Monitoring Report 2019: Migration, Displacement and Education: Building Bridges, Not Walls."

¹¹² "Education 2030: A Strategy for Refugee Education." United Nations High Commissioner for Refugees, 2019.

¹¹³ Kamel, Hania, 2006.

Unsurprisingly, many have called for strengthening the effectiveness of ECD and psychosocial interventions by explicitly involving caregivers as well as linking to the health and education sectors of host countries.¹¹⁴ ¹¹⁵ This would provide opportunities for medical and mental health screenings for both caregivers and young children. And when coupled with psychosocial programs, refugee children tend to have better measures of physical and psychosocial health.¹¹⁶

4. Linking ECD and PSS Interventions to the UN 2030 Sustainable Development Goals

As demonstrated in the literature review of ECD and PSS interventions in migration contexts, these programs yield key positive impacts for vulnerable children and infants, as well as for their caregivers. Given the programs' potential to enhance human development, strong arguments can be made about their contributions to the United Nation's seventeen Sustainable Development Goals (SDGs). These contributions are especially crucial considering that fully achieving the SDGs will be impossible if we do not target and include the world's most vulnerable populations, particularly refugees, in development programs.

The graphics and accompanying text below represent a qualitative assessment, based on the literature, of the extent to which ECD and PSS interventions facilitate achievement of the SDGs. We used a basic color scheme to indicate the strength/relevance of the links between these interventions and the SDGs. Yellow indicates medium relevance, while green indicates a stronger, more direct linkage.

4.1. Goal 2: Zero Hunger

¹¹⁴ Tamburlini, Giorgio, Stefania Manetti, and Giacomo Toffol. "Primary Health Care and Early Childhood Development." *The Lancet* 378, no. 9807 (December 3, 2011): e16.

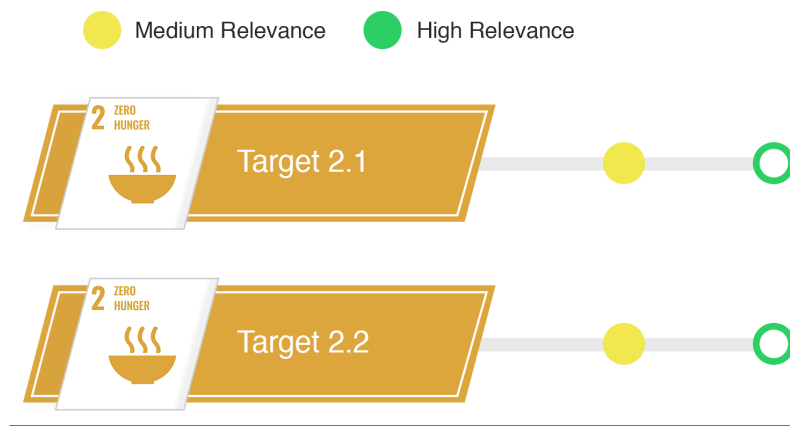
¹¹⁵ Woodland, Lisa, David Burgner, Georgia Paxton, and Karen Zwi. "Health Service Delivery for Newly Arrived Refugee Children: A Framework for Good Practice." *Journal of Paediatrics and Child Health* 46, no. 10 (2010): 560–67.

¹¹⁶ Dybdahl, Ragnhild, 2001.

Successful implementation of ECD programs can help us get closer to the realization of goal 2 of SDGs which advocates zero hunger. Two of the sub-goals or targets that are especially affected by these programs are:

Target 2.1. By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

Target 2.2. By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.



Providing adequate food and nutrition to the most vulnerable children is a basic prerequisite for achieving equitable and sustainable development. The extent to which ECD programs can contribute to the fulfilment of these two targets varies. Target 2.1 focuses on the provision of sufficient and nutritious food for all while target 2.2 focuses on removing poor health outcomes such as stunting. Ideally, there is scope for ECD programs to include food and nutrition components and provide children in vulnerable situations with healthy meals. ECD programs have an advantage of being connected with the children and their parents right from their early years and have the ability to understand local requirements of good health and well-being. The integrated provision of these services could also save resources which is especially important in these resource-constrained settings. However, based on the review of existing literature it is clear that not many programs have incorporated this component. While there is

support for multi-dimensional programs involving health, education and nutritional aspects, we do not have concrete studies that have evaluated the medium- and long-term impacts of such programs on human development.¹¹⁷

As for target 2.2., some studies have shown that psychosocial support has more long-term implications for weight gain and physical health compared to programs that just provide nutritional assistance.¹¹⁸ Home-based programs have specifically proven to reduce growth-stunting.¹¹⁹ Additionally, for young children and infants, provision of optimal nutrition and feeding practices depends on the parents and caregivers' habits, behaviors and notions.¹²⁰ Enhanced knowledge and skills of caregivers, through ECD programs, can have benefits for child development as well as nutrition. For instance, improved responsive care can support healthy feeding practices as well as social-emotional and cognitive-language development.

4.2. Goal 3: Good Health and Well-Being

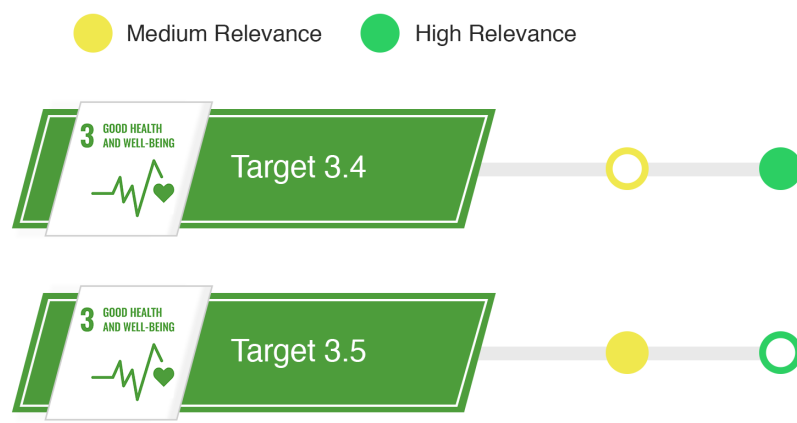
Forced migration and other humanitarian emergencies have a profoundly negative impact on the psychosocial functioning and mental health of children and infants, and interventions in these contexts designed to mitigate these factors have been shown to substantially improve well-being. There is also some evidence from other vulnerable, non-migrant groups that, in the long-run, ECD and psychosocial interventions reduce the likelihood of substance abuse and other harmful behaviors later in life. Below, our qualitative assessment of the relevance of SDG 3 sub-goals derives from these research findings:

¹¹⁷ Engle, Patrice L. et al., 2007.

¹¹⁸ Walker, Susan P. et al., 2005.

¹¹⁹ Rockers, Peter C. et al., 2018.

¹²⁰ Hurley, Kristen M, Aisha K Yousafzai, and Florencia Lopez-Boo. "Early Child Development and Nutrition: A Review of the Benefits and Challenges of Implementing Integrated Interventions¹²³⁴." *Advances in Nutrition* 7, no. 2 (March 9, 2016): 357–63.



Target 3.4. By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

Target 3.5. Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

Many children in migration contexts are at high risk of malnourishment, PTSD, and toxic stress syndrome, all of which contribute to higher rates of non-communicable diseases such as diabetes and cardiovascular disease later in life.¹²¹ These conditions are generally associated with premature mortality. Robust evidence from interventions serving both refugee and other vulnerable children shows that ECD and PSS programs reduce PTSD symptoms, anxiety, stress and hopelessness, which ultimately promotes neurocognitive development in children. Nearly all interventions in our review showed positive mental and physical health outcomes for participants and their caregivers (when included).

Regarding target 3.5, ECD and PSS interventions do not directly prevent or treat substance abuse. However, several long-term studies on ECD interventions indicate that ECD programming reduces the likelihood of substance abuse later in life. These findings are especially relevant for refugee children because, on average, they are subjected to more adversity and trauma compared to their peers in non-migration contexts.

4.3. Goal 4: Quality Education

¹²¹ Duncan, Greg J. et al., 2007.

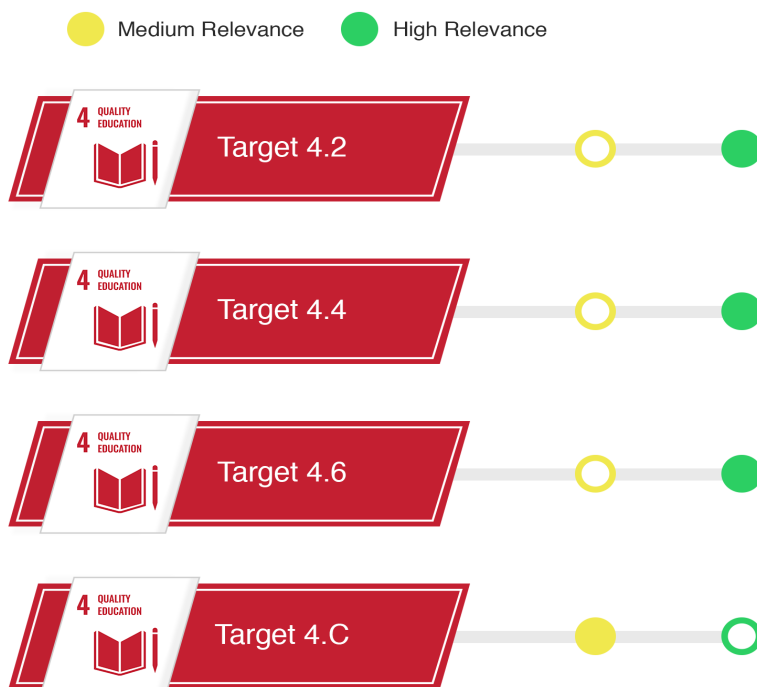
Pre-primary schooling is essentially a part of Sustainable Development Goal number four, quality education, which emphasizes lifelong learning and education for all. However, such a program is still lacking in a number of places including in migration contexts. ECD interventions are one way to fulfill the gap and provide such an important opportunity. Implementing ECD programs in humanitarian contexts such as refugee camps will contribute positively specifically towards the four following targets of Quality Education goal.

Target 4.2. By 2030, ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education.

Target 4.4. By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

Target 4.6. By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.

Target 4.C. By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially in the least developed countries and small island developing states.



Studies have revealed that pre-primary schooling or ECD interventions are correlated with educational attainment and, in some cases, learning outcomes in later stages of life. For example, in the study of resettled 15-year old immigrants mentioned in the literature review above, those who had attended pre-primary education for at least one year scored significantly higher on standardized tests than those with less than one year of pre-primary education. This echoes the relevance of ECD interventions with target 4.2 of the goal, i.e. by 2030, ensure that all girls and boys have access to quality ECD, care and pre-primary education so that they are ready for primary education.

Well-conducted cognitive, social-emotional, or play-based programs that prepare children for primary school predict greater educational attainment later in life.^{122 123} A study conducted in Germany and Austria found that immigrants’ pre-primary school attendance significantly increased the tendency of continuing education through secondary and tertiary school.¹²⁴ Readiness for and attainment of effective formal education will equip children with literacy and

¹²² Written Sara-Christine Dallain and Katie-Jay Scott, 2013.

¹²³ El-Kogali, Safaa El Tayeb, and Caroline Gould Krafft, 2015.

¹²⁴ “Global Education Monitoring Report 2019: Migration, Displacement and Education: Building Bridges, Not Walls” (UNESCO, 2018).

numeracy, basic skills that increase employability. A number of ECD programs promote parents'/ caregivers' involvement so as to engender a healthy parent-child relationship. By doing so, these programs also indirectly advocate for adult literacy and numeracy, as well as social-emotional skills which are hard and soft skills pertaining to employability. The route towards targets 4.4, and 4.6, which concern working competency and cognitive skills, can be advanced greatly with the implementation of effective ECD interventions.

Quality teacher training is especially important in migratory contexts where children have likely faced moderate to extreme trauma and would benefit from specialized education programs addressing their specific needs. For children experiencing trauma or stress, the presence of trusted and supportive adults such as context-specific trained teachers can help the children manage and cope with such stress. For the target 4.C, concerning the supply of qualified teachers, ECD programs can be relevant through provision of accompanying training sessions for instructors or teachers, especially in the migratory contexts, where a shortage of qualified staff or volunteers is not uncommon. However, many NGOs, IGOs, and local governments do not have the resources to incentivize teachers to work in the refugee contexts, where the living environments may be unsafe, and the work may be regarded as having low social status.¹²⁵

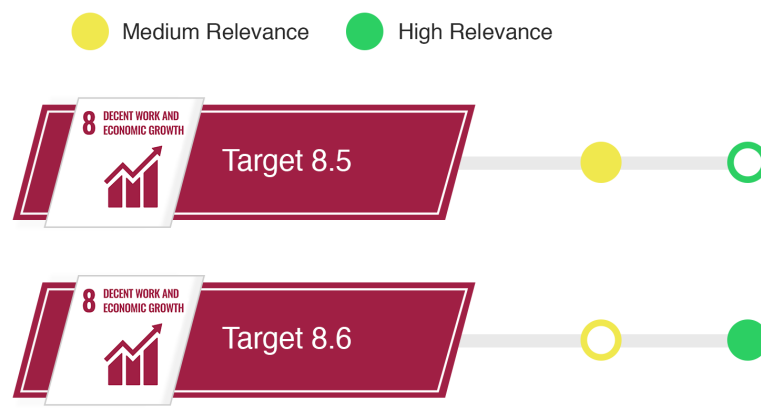
4.4. Goal 8: Decent Work and Economic Growth

ECD for refugee and migrant children can also help achieve SDG goal eight, which aims to guarantee decent work and economic growth. The existing literature on ECD in migration contexts has specific implications for two of the goal eight targets:

Target 8.5. By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

Target 8.6. By 2020, substantially reduce the proportion of youth not in employment, education or training.

¹²⁵ Mason, Claire, and Shannon Orcutt, 2018.



As established in the literature review, access to effective ECD programs can have a significant impact on a child’s success later in life. Studies of resettled refugees found that at least one year of pre-primary education leads to better academic performance, and increased chance of continuing education through secondary and tertiary school.^{126 127} This directly helps achieve target 8.6, but also has implications for target 8.5. Better performance in school and achievements in higher education are strongly correlated with higher levels of employment later in life.¹²⁸

Other studies show that social-emotional learning support for vulnerable children can translate into long-term economic success in the form of higher annual earnings. A study of an ECD program centered on social-emotional learning for growth-stunted children living in poverty in Jamaica provides strong evidence. Twenty years after program implementation, annual earnings of growth-stunted children who attended the program had caught up with earnings of non-stunted peers. Growth-stunted children who did not have access to the ECD program, however, earned 25% less on average.¹²⁹ During the twenty-year follow-up period, growth-stunted ECD participants were more likely to have full-time employment and higher salaries than growth-stunted non-ECD participants. Researchers estimate that these findings are likely understated, as many of

¹²⁶ OECD iLibrary. “Starting Strong 2017 | READ Online.” Accessed September 16, 2019. https://read.oecd-ilibrary.org/education/starting-strong-2017_9789264276116-en.

¹²⁷ “Global Report on Equity and Early Childhood.” Consultative Group on Early Childhood Care and Development, 2016.

¹²⁸ Sayre, Rebecca K. et al., 2015.

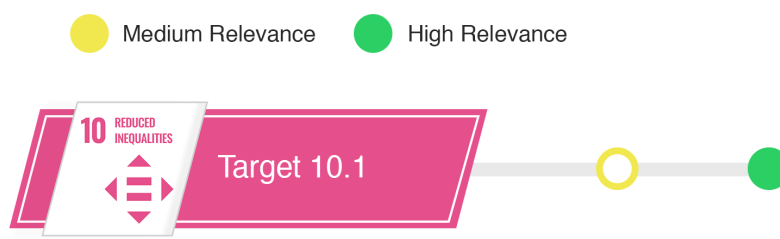
¹²⁹ Gertler, Paul et al., 2014.

the growth-stunted ECD participants were attending school full-time during the follow-up period. This study establishes a clear link between access to ECD for vulnerable children and long-term employment and education opportunities, enumerated in targets 8.5 and 8.6.

There is also evidence that access to ECD for disadvantaged populations can increase overall GDP growth. A widely-cited study of a simulation model and subsequent regression analysis of a cost-benefit framework concludes that increasing preschool enrollment in low-income countries by 25-50% can increase GDP by up to US \$14 billion.¹³⁰ This analysis is based on the data showing preschool enrollment is highly correlated with long-term economic success (as evidenced by the study on Jamaican children). Increasing access to pre-primary ECD programs for refugee children is likely to produce similar results, which help achieve the full and productive employment cited in target 8.5. It can also help realize goal 8.6 by increasing the number of individuals in employment and education.

Center-based ECD programs can have the spill-over effect of increasing employment rates by allowing parents and caregivers to attend work while children attend the program. Though no official studies have calculated the direct financial impacts for families, numerous programs have cited this phenomenon as an unintended benefit.^{131 132} This outcome helps realize target 8.6 by increasing employment rates for disadvantaged migrant families.

4.5. Goal 10: Reduced Inequalities



¹³⁰ Engle, Patrice L. et al., 2011.

¹³¹ Dalziel, Kim M., Dale Halliday, and Leonie Segal, 2015.

¹³² Rockers, Peter C. et al., 2018.

Target 10.1. By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

As referenced in previous sections, a study on ECD and psychosocial stimulation for growth-stunted children in Jamaica, the intervention was associated with closing income gaps later in life.¹³³ Children attending ECD programs also tend to have higher earning, commit fewer crimes, and depend less on social service provisions,¹³⁴ all of which encompass both individual and societal economic benefits. Several longitudinal studies on the benefits of ECD programming for underserved children referenced in this paper also point to higher earnings for participants later in life. Thus, these interventions have the potential to greatly reduce economic inequalities, especially amongst the poorest 40% of a given population.

4.6. Goal 16: Peace, Justice and Strong Institutions

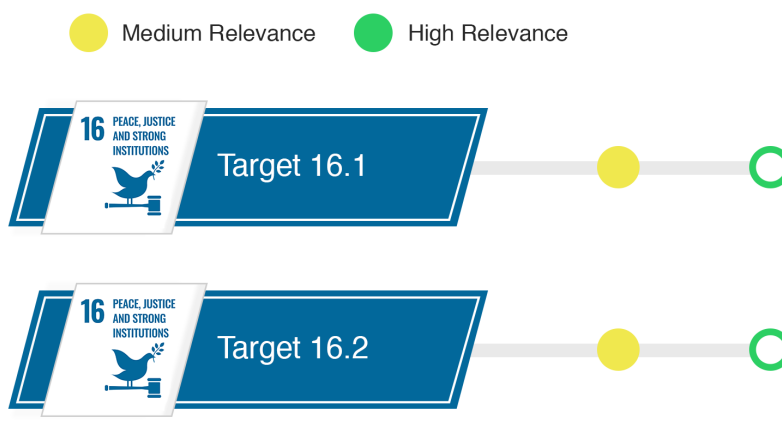
ECD and PSS in migration context have the potential to contribute towards the realization of SDG 16, which aims to promote peaceful and inclusive societies for sustainable development. The literature suggests that, through ECD interventions, the fostering of behaviors that are essential for peacebuilding, such as trust and cooperation, can have lifelong consequences for the refugee children. The SDGs aim to improve the lives of all, particularly, the lives of the most vulnerable populations. Given the number of people who are trapped in conflict-affected countries, and who are forcibly displaced within as well as across borders, some of the key sustainable development targets are at risk of not being realized. ECD in migration context has specific implications for the following two targets:

Target 16.1. Significantly reduce all forms of violence and related death rates everywhere.

Target 16.2. End abuse, exploitation, trafficking and all forms of violence against and torture of children.

¹³³ Walker, Susan P. et al., 2005.

¹³⁴ Gertler, Paul et al., 2014.



Given the opportunity to pursue education in a safe learning environment, children are more likely to develop skills that are required for peacebuilding and conflict resolution. After going through trauma at an early stage in their life, children may develop anti-social behavior and begin to distrust people outside their groups. This reduces the possibilities for mutual cooperation and results in the emergence of hostile behaviors. Psychosocial interventions that are designed to develop peacebuilding skills and behaviors such as mindfulness, empathy, trust, and cooperation can help deal with built-up anger and hostility. These skills can also empower children to take a more constructive role in their communities by acting as ‘agents of change’ when they grow up. Children often are not aware of the myriad of socioeconomic and cultural differences that plague adult lives. Therefore, they tend to see their peers without any social or cultural prejudices. If pro-social behaviors are instilled in children, this could contribute towards mitigating violent behavior in their adult lives.

A number of studies have shown that early childhood trauma can lead to social isolation and aggression which have high implications for long-term peacebuilding. For example, Wessells has pointed out that exposure to multiple risk factors in children can exponentially increase their risk of developmental damage¹³⁵. If these risk factors are not offset by protective factors, then the children develop mental and psychosocial issues that increases their vulnerability and reduces their resilience. Other studies have shown that, in the absence of caregivers and psychosocial support, children exposed to conflict and violence can experience prolonged activation of the body’s stress response system which disrupts brain development and creates the perception that

¹³⁵ Wessells, Mike. “Trauma , Peacebuilding and Development : An Africa Region Perspective.” New Delhi, India, 2008.

the world is a hostile place. Likewise, there is evidence from neuroscience which suggests that, early childhood trauma can impact the brain development in ways which may impact the children's ability to build meaningful social relations.

5. Policy Recommendations

Given the evidence put forth in the direct and related literature on ECD and psychosocial programming, and the links between these interventions and the SDGs, we propose several policy recommendations for various stakeholders of ECD interventions that aim to strengthen program design and delivery and put forth an agenda for further research. Implementing these policy recommendations would strengthen the existing linkages between these critical interventions and achieving the related SDGs.

For the International Community: UNHCR and Other Organizations that Fund and Coordinate ECD Program

1. **The international community, and in particular the UNHCR, need to espouse a common vision for how ECD and psychosocial programs should be structured and implemented.** This should include an index of acceptable program models that follow the WHO and World Bank's Nurturing Care Framework and can include a number of components currently being implemented in the field--e.g. play-based programs, those that incorporate nutritional supplementation, etc.
2. **Funding agencies, both at the UN and in the private sector, require monitoring and evaluation plans in grant application guidelines and offer funding commitments commensurate with program needs.** This will allow implementing agencies to plan and execute valid impact evaluations so that key variables can be properly identified, limitations can be mitigated, and results can be generalized to other contexts. Such robust evaluations can be used to inform more data-driven policies for effective ECD and psychosocial program implementation.
3. **Finally, it will remain crucial for the UNHCR and other UN offices to continue to provide technical assistance to implementing agencies working on the ground. As**

interest in these interventions continues to grow, the UN is positioned to play an important role in coordinating with NGO partners and providing technical assistance.

For Countries Hosting Refugee Populations

- 1. In order to best serve and protect refugees within their borders, host governments should integrate these populations within their local health, social service and educational systems.** Integration with local and national infrastructure allows for partnerships in service provision and therefore enhances the effectiveness and reach of ECD and psychosocial interventions. This can be achieved by passing national legislation, like, for example, Uganda's 2006 Refugee Act that enables refugees' access to health, social service, and educational benefits.
- 2. It is also crucial for host countries to capitalize on their expertise in the educational sector by providing training opportunities for teachers and facilitators of ECD programs.** Governments can support this by creating scholarship opportunities for host country nationals that take their training for eventual teacher accreditation. Teachers would serve a specified commitment period, after which they can choose to continue serving in low-resource settings such as refugee encampments and/or receive end-of-service stipends. Such a program might be modelled after AmeriCorps in the United States, a voluntary civil-society program that provides cost-of-living stipends, student loan deferment, and financial awards for higher education expenses.
- 3. National capacity for teachers and education-focused organizations—inclusive of both host country nationals and foreign NGO staff members—could be strengthened via the creation of a national communication platform for sharing best practices in teaching displaced children.** The platform could include a number of different components like training modules, best practices, and a way for educators to connect and share their experiences so as to better understand common pain points.

4. **Host governments should also prioritize the health and well-being of the most vulnerable refugees via civil registration of children under five years old.** The registration and tracking of vulnerable children will help direct available resources for more streamlined and effective program implementation. Civil registration of children also protects from myriad threats to their security, like exploitation and human trafficking.

For Agencies/Organizations Implementing ECD and Psychosocial Interventions

1. **Implementing agencies should work to build synergetic relationships that would help to realize mutually agreed upon global goals concerning child refugees.** Implementing agencies have a key role to play in the successful implementation of psychosocial interventions. However, each implementing agency might be specialized in dealing with certain components of psychosocial rehabilitation, such as social, behavioral, cognitive, and educational. Furthermore, the implementing agencies have to work closely with the local government as well as other organizations operating in that area. Mutual synergies between organizations specialized in dealing with various refugee-related issues can help overcome certain limitations that would otherwise hinder effective program implementation. Cooperation between government and NGOs is particularly important because the government, in many cases, mainly provides financial and technical support while the NGOs work closely with the refugees on-ground. The NGOs not only champion innovative approaches but also facilitate the delivery of resources.
2. **It is imperative for implementing agencies to assess the effectiveness of their programs and make data-informed and data-driven decisions.** In order to achieve this, implementing agencies should establish indicators against which to evaluate the actual outcomes. They should also collect data to improve the value of their interventions and identify the best practices. While the implementing agencies can work within a standardized framework, developed by the UN, they should assess the specific needs of the target refugee population and tailor their programs accordingly.

3. **In places where refugee children have access to schools in a safe learning environment, PSS should be integrated into the existing program structures.** The literature reveals that schools provide promising locations to sustain interventions because this is where most refugee children get together on a regular basis. Implementing agencies should consider working within the existing school system rather than trying to establish separate learning spaces.

4. **While working to reduce trauma-related stress in refugee children, it is also important that the implementing agencies consider the involvement of host communities to foster social cohesion.** Where applicable, links should be established between educational institutions in host communities and refugee schools to arrange for field trips and extracurricular activities. The current literature supports funding of psychosocial rehabilitation components of community support systems to enhance the recovery of trauma related illnesses. Furthermore, the literature also supports the involvement of parents/ caregivers of children enrolled in ECD programs as the evidence shows that caregivers stand to benefit mentally and emotionally from ECD program participation.

For Researchers and Academic Institutions/Partners

1. Despite overwhelming consensus on the importance of ECD and psychosocial programming, literature on the effectiveness of these interventions within the migration context is limited. **Researchers and academic institutions can help bridge this knowledge gap by assisting implementing agencies in the design, monitoring and evaluation of program activities.** This will allow for the identification and endorsement of program components that are empirically shown to work in order to save resources from being spent on programs that do not work as effectively.

2. Researchers and academic partners can also support the evaluation of the long-term impacts of ECD and psychosocial program activities. **More longitudinal studies should be designed and carried out to assess the long-term effects of these interventions, and many academic institutions often have the resources to support this goal.**

3. Ultimately, by helping to design, monitor, and evaluate ECD and psychosocial programs, researchers and academic institutions can play a crucial role in the design of more effective interventions in the future. This research can also include identifying which psychosocial techniques and program components work and which training materials might be needed by implementing agencies in order to carry out successful interventions.

Operationalizing these policy recommendations involves partnerships at all levels--from the international community and host countries to implementing agencies and academic partners--to assure the development and implementation of effective, research-based ECD and psychosocial interventions. Thus, the policies described above would also contribute toward SDG 17 - Partnerships for the Goals.

Partnerships for policy and program coordination are both a great opportunity for enhancing program design and implementation, yet also a challenge, as it requires political will and new alliances to be formed. Despite these hurdles, recent efforts such as the Global Compact on Refugees, national legislation to prioritize ECD programming as a part of official aid,¹³⁶ and major philanthropic donations such as the LEGO Foundation's \$100 million grant to expand research on ECD in humanitarian contexts, are strong signs of the prioritization of these critical interventions. In addition, development assistance for health, while somewhat stagnant between 2010-2018, saw a 62.5% increase in funding for child and newborn health during that same period.¹³⁷ There is clearly global momentum to improve the lives of children in migration and humanitarian contexts, and policymakers, implementing agencies, host countries, funders, and research partners should capitalize on this momentum to make ECD and PSS interventions a reality for a greater share of the world's most vulnerable children.

¹³⁶ U.S. Public Law 109-95: Assistance for Orphans and Other Vulnerable Children in Developing Countries Act of 2005 (PL 109-95), <https://www.childreninadversity.gov/docs/default-source/default-document-library/pl-109-95.pdf?sfvrsn=2>

¹³⁷ Institute for Health Metrics and Evaluation, "Financing Global Health." <https://vizhub.healthdata.org/fgh/>

In conclusion, there is ample evidence to show that ECD and PSS in migration context is essential for the well-being of the refugee children. The evidence also links some of the short-term and long-term impacts of PSS interventions on sustainable development goals. Incorporating ECD and PSS in migration context can help mitigate some of the adverse lifelong consequences for children by giving them access to education in a safe and healthy environment. Given that the refugee children represent a significant population who often find themselves in protracted refugee situations, their early upbringing can lay the foundation for societal change within their communities and beyond.

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